

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS
PATENT OF THE UNITED STATES IS:

1. A dispensing head having an axis X, and which can actuate a dispensing element mounted on a receptacle to dispense a product contained in the receptacle, said dispensing head comprising:

a) attachment means for attaching the dispensing head onto a receptacle;

b) a dispensing conduit which can be placed in communication with the inside of the receptacle, the dispensing conduit comprising at least two passages of different cross-sections, the dispensing conduit being formed by molding as a single piece with said attachment means integral therewith via a deformable connection means; and

c) actuating means for actuating the dispensing element and for causing the conduit to communicate with the inside of the receptacle, the actuating means having a dispensing orifice formed at the extremity of a channel, wherein said channel has a length greater than a diameter of the dispensing orifice, and wherein the actuating means are movable relative to the dispensing conduit between at least two positions, said at least two positions including a first position in which the dispensing orifice communicates with a first passage of the at least two passages, and a second position in which the dispensing orifice communicates with a second passage of the at least two passages.

2. A dispensing head according to claim 1, wherein the deformable connection means is elastically deformable;

3. A dispensing head according to claim 1, wherein the attachment means are mounted axially in a fixed manner on the receptacle.

4. A dispensing head according to claim 1, wherein the deformable connection means allows movement of the dispensing conduit in response to actuation of the actuating means.

5. A dispensing head according to claim 1, wherein the deformable connection means includes a transverse wall extending in a direction transverse to axis X, and wherein the transverse wall is corrugated.

6. A dispensing head according to claim 1, wherein the dispensing conduit includes a first extremity capable of engaging with the dispensing element of the receptacle.

7. A dispensing head according to claim 6, wherein the dispensing conduit includes a second extremity onto which the actuating means are fitted.

8. A dispensing head according to claim 7, wherein the dispensing conduit is positioned on the axis X when the dispensing head is mounted onto the receptacle.

9. A dispensing head according to claim 8, wherein a pintle is positioned inside the dispensing conduit so as to define an annular passage for the product over at least part of the dispensing conduit.

10. A dispensing head according to claim 1, wherein the dispensing conduit is positioned on the axis X when the dispensing head is mounted onto the receptacle.

11. A dispensing head according to claim 1, wherein a pintle is positioned inside the dispensing conduit so as to define an annular passage for the product over at least part of the dispensing conduit.

12. A dispensing head according to claim 1, wherein the at least two passages are slots extending parallel to the axis X, said slots having different widths.

13. A dispensing head according to claim 1, wherein the actuating means are movable in rotation about the axis X between the first and second positions.

14. A dispensing head according to claim 13, wherein the dispensing head is configured so as to allow the dispensing element to be actuated only when the actuating means are in the first and second positions.

15. A dispensing head according to claim 1, wherein the dispensing head is configured so as to allow the dispensing element to be actuated only when the actuating means are in the first and second positions.

16. A dispensing head according to claim 15, wherein the dispensing head includes an axial stop against which the actuating means bear when not in either of the first or second positions so as to prevent actuation of the dispensing element.

17. A dispensing head according to claim 16, further including at least two radial stops limiting the rotational movement of the actuating means.

18. A dispensing head according to claim 15, further including at least two radial stops limiting the rotational movement of the actuating means.

19. A dispensing head according to claim 18, further including means for audible identification to indicate positioning in either of the first and second positions.

20. A dispensing head according to claim 1, further including means for audible identification to indicate positioning in either of the first and second positions.

21. A dispensing head according to claim 20, wherein the means for audible identification provide audible identification by the engagement of a first projection formed on the actuating means and a second projection integral with the dispensing conduit, the first projection being capable, when the actuating means move relative to the conduit, of making contact with the second projection and elastically deforming the latter as it passes across it, thereby producing an audible signal.

22. A dispensing head according to claim 21, further including means for visual identification to identify the first and second positions.

23. A dispensing head according to claim 1, further including means for visual identification to identify the first and second positions.

24. A packaging and dispensing unit for a product, including:

a receptacle containing the product and fitted with a dispensing element mounted on the receptacle; and

a dispensing head having an axis X and which can actuate a dispensing element mounted on a receptacle to dispense a product contained in the receptacle, said dispensing head comprising:

a) attachment means for attaching the dispensing head onto a receptacle;

b) a dispensing conduit which can be placed in communication with the inside of the receptacle, the dispensing conduit comprising at least two passages of different cross-sections, the dispensing conduit being formed by molding as a single piece with said attachment means integral therewith via a deformable connection means; and

c) actuating means for actuating the dispensing element and for causing the conduit to communicate with the inside of the receptacle, the actuating means having a dispensing orifice formed at the extremity of a channel, wherein said channel has a length greater than a diameter of the dispensing orifice, and wherein the actuating means are movable relative to the dispensing conduit between at least two positions, said at least two positions including a first position in which the dispensing orifice communicates with a first passage of the at least two passages, and a second position in which the dispensing orifice communicates with a second passage of the at least two passages.

25. A packaging and dispensing unit according to claim 24, wherein the receptacle is pressurized and the dispensing element is a valve.

26. A packaging and dispensing unit according to claim 25, wherein the dispensing conduit is fitted onto a valve stem of the valve.

27. A packaging and dispensing unit according to claim 24, wherein the product in said receptacle is one of a cosmetic and a personal care product.

28. A packaging and dispensing unit according to claim 24, wherein the product in said receptacle is a hair product.

29. A dispensing head having an axis X, and which can actuate a dispensing element mounted on a receptacle to dispense a product contained in the receptacle, said dispensing head comprising:

a) attachment means for attaching the dispensing head onto a receptacle;

b) a dispensing conduit which can be placed in communication with the inside of the receptacle, comprising at least two passages of different cross-sections, the dispensing conduit being formed by molding as a single piece with said attachment means integral therewith via a deformable connection means; and

c) actuating means for actuating the dispensing element and for causing the conduit to communicate with the inside of the receptacle, the actuating means having a dispensing orifice defined by an attached nozzle, wherein the actuating means are movable relative to the dispensing conduit between at least two positions, a first position in which the dispensing orifice communicates with a first passage of the at least two passages, and a second position in which the dispensing orifice communicates with a second passage of the at least two passages.

30. A packaging and dispensing unit for a product comprising:

a receptacle within which a product is provided, said receptacle including a dispensing element through which the product flows when dispensed;

a first assembly mounted to said receptacle, said first assembly including a conduit having one end coupled to said dispensing element of said receptacle, said conduit including a second end having at least two passages of different cross-sections, and wherein said first assembly includes a fixed portion which is substantially fixed with respect to the receptacle, the first assembly further including a movable portion which is movable relative to said

receptacle, and wherein said conduit is coupled to said movable portion such that upon application of force to said conduit said conduit is movable to move said dispensing element to dispense product through said dispensing element and through said conduit;

a second assembly mounted to said first assembly, wherein said second assembly is movable relative to said fixed portion of said first assembly in a first direction, and wherein a portion of said second assembly engages said conduit during movement in said first direction to apply a force to said conduit to dispense the product, and further wherein said second assembly includes a channel and an outlet orifice at one end of said channel, and wherein the product exits said packaging and dispensing unit through said outlet orifice, and further wherein another end of said channel is in selective communication with one said at least two passages of said conduit of said first assembly, and said second assembly is rotatable with respect to said first assembly to determine which passage of the at least two passages of said conduit establishes selective communication with said channel.

31. A packaging and dispensing unit according to claim 30, wherein said movable portion of said first assembly is elastically movable whereby application of a force to said second assembly to move said second assembly in said first direction causes said product to be dispensed and upon cessation of the application of the force the movable portion of the first assembly causes a return movement of the second assembly and dispensing of the product is halted.

32. A packaging and dispensing unit according to claim 30, wherein said channel of said second assembly has a length larger than a diameter of said outlet orifice of said second assembly.

33. A packaging and dispensing unit according to claim 30, wherein said first assembly is formed as a one piece molded part.

34. A packaging and dispensing unit according to claim 30, wherein said second assembly is formed as a one piece molded part.

35. A packaging and dispensing unit according to claim 34, wherein said first assembly is formed as a one piece molded part.

36. A packaging and dispensing unit according to claim 30, wherein said fixed portion of said first assembly includes an inner skirt snap fastened to said receptacle, and wherein said first assembly further includes an outer skirt surrounding said inner skirt.

37. A packaging and dispensing unit according to claim 36, wherein said receptacle includes an axis X, and wherein said movable portion of said first assembly includes an elastically deformable wall extending in a direction transverse to the axis X.

38. A packaging and dispensing unit according to claim 30, wherein said receptacle includes an axis X, and wherein said movable portion of said first assembly includes an elastically deformable wall extending in a direction transverse to the axis X.

39. A packaging and dispensing unit according to claim 30, wherein the product in said receptacle is one of a cosmetic and a personal care product.

40. A packaging and dispensing unit according to claim 30, wherein the product in said receptacle is a hair product.

41. A packaging and dispensing unit according to claim 30, wherein said second assembly includes a push button surface upon which a user presses to dispense the product.

42. A packaging and dispensing unit according to claim 30, wherein said second assembly includes a pintle which extends into a portion of said conduit of said first assembly.

43. A packaging and dispensing unit according to claim 30, wherein said first assembly includes at least one arcuate slot and said second assembly includes at least one lug which extends into said at least one arcuate slot, and wherein said second assembly is movable in said first direction relative to said first assembly as the amount by which said at

least one lug extends through said at least one arcuate slot is varied, and further wherein second assembly is rotatable relative to said first assembly as a position of said at least one lug along said at least one arcuate slot is varied.

44. A packaging and dispensing unit according to claim 43, further including means for restraining movement of said second assembly in said first direction when said channel is not aligned with a passage of said at least two passages of said conduit.

45. A packaging and dispensing unit according to claim 44, further including means for audibly indicating alignment of said channel with a passage of said at least two passages.

46. A packaging and dispensing unit according to claim 30, further including means for audibly indicating alignment of said channel with a passage of said at least two passages.

47. A packaging and dispensing unit according to claim 30, further including means for restraining movement of said second assembly in said first direction when said channel is not aligned with a passage of said at least two passages of said conduit.

48. A packaging and dispensing unit according to claim 30, further including means to visually indicate alignment of said channel with a passage of said at least two passages.

49. A packaging and dispensing unit according to claim 30, wherein said first assembly includes an outer skirt that forms an extension of said receptacle when said first assembly is mounted to said receptacle.

50. A packaging and dispensing unit according to claim 49, wherein said first assembly further includes a portion disposed above said outer skirt and having a diameter smaller than said outer skirt, the unit further including a cap which snap fits onto said portion disposed above said outer skirt, and wherein said cap forms an extension of said receptacle and said outer skirt.

51. A packaging and dispensing unit according to claim 50, wherein part of said second assembly is received inside of said portion of said first assembly disposed above said outer skirt.